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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/029,571	12/20/2001	Eiji Takahashi	NAK1-BQ83	4972
21611	7590	06/15/2004	EXAMINER	
SNELL & WILMER LLP 1920 MAIN STREET SUITE 1200 IRVINE, CA 92614-7230			TSAI, CAROL S W	
			ART UNIT	PAPER NUMBER
			2857	

DATE MAILED: 06/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/029,571

Applicant(s)

TAKAHASHI ET AL.J

Examiner

Carol S Tsai

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 January 2004.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 and 30 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☒ Claim(s) 1-6 is/are allowed.  
6) ☒ Claim(s) 30 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 30 is rejected under 35 U.S.C. 102(b) as being anticipated by U. S. Patent No. 5,956,415 to McCalley et al.

McCalley et al. disclose a tamper-resistant multilayer board for transfer of pixel data to be encrypted (see col. 3, lines 1-11 and lines 53-67; col. 7, lines 31-42; and col. 10, lines 45-59) comprising: a board member (a secure sensor package 190 shown on Fig. 22), having a plurality of layers and one or more components mounted thereon (see Figs. 7 and 22 and col. 6, lines 32-63); a reception/decryption unit mounted on the board member (see col. 3, lines 43-52 and col. 11, lines 6-10); and output interface unit (encrypted output circuit 194 shown on Fig. 22) mounted on the board member (a secure sensor package 190 shown on Fig. 22) and operatively connected to the reception/decryption unit (see col. 3, lines 43-52 and col. 11, lines 6-10); and a conductive path (see col. 5, lines 50-61; col. 6, lines 33-63; and col. 11, lines 6-15) operatively designed for interconnecting the reception/decryption unit and output interface unit and positioned adjacent an interior layer surface for a portion of the

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conductive path and positioned under the reception/decryption unit and/or the output interface unit (encrypted output circuit 194 shown on Fig. 22) only for the remainder of the conductive path to prevent direct access from the exterior of the board member (see Figs. 7 and 22 and col. 10, line 45 to col. 11, line 23).

***Allowable Subject Matter***

4. Claims 1-6 are allowed.
5. The following is a statement of reasons for the indication of allowable subject matter:

U. S. Publication 2002/0002683 to Benson et al. is the reference closest to the claimed invention. Benson et al. disclose a multilayer board, comprising a signal line requiring tamper-resistance, the signal line including: (a) a conductive trace and (b) a conductive via that passes through layers of the multilayer board, wherein the conductive trace and an end of the conductive via existing on an outside layer of the multilayer board are placed under one or more circuit components mounted on the outside layer. However, Benson et al. do not teach a multilayer board on whose outside layer, one or more circuit components are mounted, the multilayer board comprising: a signal line requiring tamper-resistance, the signal line being connected to a predetermined component among the one or more circuit components and including: (a) a conductive trace wherein and (b) a conductive via that passes through layers of the multilayer board, wherein the conductive trace and an end of the conductive via existing on an the outside layer of the multilayer board are placed only under the predetermined component, and not on the

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other area of the outside layer; and including all of the other limitations in the respective independent claims.

***Response to Arguments***

6. Applicant's arguments filed 01/26/2004 have been fully considered but they are not persuasive.

Applicants argue that in the McCalley et al. reference, presumably it would be possible to remove the tamper-resistant housing 191 in an appropriate environment so that the sensor package 190 would expose signal lines and permit a probing of data by contacting the signal lines, because the circuit will operate normally even if the tamper-resistant housing 191, which is not necessary for the circuit operation, is removed, and that thus, if a third party is familiar with the other light and power arrangements to destroy data, it may be possible to remove the housing and counteract such a destruction. The Examiner disagrees with Applicants. McCalley et al. disclose a fingerprint sensor package comprising a processor operatively connected between the fingerprint sensor and the encrypting output means wherein the processor preferably comprising reference fingerprint matching means for determining if a sensed fingerprint matches a reference fingerprint information stored in reference fingerprint storage means, wherein the sensor package also preferably includes removing means for removing reference fingerprint information from the reference fingerprint storage means responsive to tampering in order to enhance security of the stored reference fingerprint information (see McCalley et al. col. 3, lines 12-23).

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7. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the signal lines covered with only those components that are necessary for the circuit operation) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

### ***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### ***Contact Information***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carol S. W. Tsai whose telephone number is (571) 272-2224. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00

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PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on (571) 272-2216. The fax number for TC 2800 is (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2800 receptionist whose telephone number is (571) 272-1585 or (571) 272-2800.

In order to reduce pendency and avoid potential delays, Group 2800 is encouraging FAXing of responses to Office actions directly into the Group at (703) 872-9306. This practice may be used for filing papers not requiring a fee. It may also be used for filing papers which require a fee by applicants who authorize charges to a PTO deposit account. Please identify the examiner and art unit at the top of your cover sheet. Papers submitted via FAX into Group 2800 will be promptly forwarded to the examiner.

Carol S. W. Tsai  
Patent Examiner  
Art Unit 2857

06/04/04

  
MARC S. HOFF  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800